

WHAT IS CLAIMED IS:

1. A method of protecting debris-intolerant micromechanical devices, said method comprising:
attaching a device to a substrate, said device having at least one debris-generating
region which source debris over the lifetime of said device, and at least one debris-
intolerant region; and
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encapsulating at least one of said debris-generating regions with a blocking
material, said blocking material avoiding contact with said debris-intolerant region.
2. The method of Claim 1, said attaching step further comprising:
attaching a device to a substrate, said device having at least one said debris-
generating region comprising a sidewall formed where said device was attached to a
wafer.
3. The method of Claim 1, said encapsulating step further comprising:
encapsulating at least one of said debris-generating regions using an adhesive
blocking material.
4. The method of Claim 1, said encapsulating step further comprising:
encapsulating at least one of said debris-generating regions using a photo-curable
adhesive blocking material.
5. The method of Claim 1, said encapsulating step further comprising:
encapsulating at least one of said debris-generating regions using an adhesive
blocking material that remains tacky to perform a gettering function.
6. The method of Claim 1, said encapsulating step comprising the steps of:
encapsulating portions of said device with said blocking material; and

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removing said blocking material from said debris-intolerant regions.

7. The method of Claim 1, further comprising the step of:
 - electrically connecting at least one bond pad on said substrate with at least one bond pad on said device using an electrical connection.
- 5 8. The method of Claim 7, said encapsulating step comprising:
 - encapsulating at least one of said debris-generating regions and said electrical connection.
9. The method of Claim 7, said encapsulating step comprising:
 - electrically connecting at least one bond pad on said substrate with at least one bond pad on said device using a bond wire.
10. The method of Claim 7, said encapsulating step comprising:
 - encapsulating at least one of said debris-generating regions and said bond wires.
11. A packaged micromechanical device comprising:
 - a package substrate;
 - a micromechanical device supported by said package substrate, said micromechanical device having at least one debris-generating region;
 - blocking material attached to said device and covering at least one said debris-generating region; and
 - a package lid supported by said package substrate and enclosing said micromechanical device and said blocking material.
- 20 12. The device of Claim 11, at least one said debris-generating regions comprising a sidewall formed where said device was attached to a wafer.
13. The device of Claim 11, said blocking material comprising an adhesive.

14. The device of Claim 11, said blocking material comprising an photo-curable adhesive.
15. The device of Claim 11, said blocking material comprising an adhesive that remains tacky to perform a gettering function.
16. The device of Claim 11, further comprising:
 - 5 electrical connections between said device and said package substrate, said blocking material encapsulating said electrical connections.

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